



The Congressional Budget Office's Request for Appropriations for Fiscal Year 2023

Note

Numbers in the text, tables, and figures may not add up to totals because of rounding.

Contents

CBO's Budget Request and Its Consequences for Staffing and Output	2
Funding Request for Personnel Costs and Consequences for Staffing	2
Funding Request for Nonpersonnel Costs	2
Consequences for Output	3
CBO's Role in Support of the Congress	4
CBO's Staffing	5
Recommendations to Report	5
Highlights of CBO's Work in 2021	6
Analyzing Major Legislation	6
Meeting Other Legislative Needs of the Congress	6
Performing Budgetary and Economic Analysis	7
CBO's First Goal for 2022 and 2023: Providing Budgetary and Economic Information That Is Objective and Insightful	8
Fulfilling Requests for Technical Assistance	8
Providing Cost Estimates and Mandate Statements	8
Producing Estimates for Appropriation Bills	8
Publishing Reports, Working Papers, and Testimony About the Budget and Economy	9
CBO's Second Goal for 2022 and 2023: Strengthening Responsiveness	10
CBO's Third Goal for 2022 and 2023: Enhancing Transparency	11
Testifying and Publishing Answers to Questions	11
Explaining Analytical Methods	11
Releasing Data	11
Analyzing the Accuracy of CBO's Estimates	12
Comparing Current Estimates With Previous Ones	12
Comparing CBO's Estimates With Those of Other Organizations	12
Estimating the Effects of Policy Alternatives	12
Characterizing the Uncertainty of Estimates	12
Creating Data Visualizations	12
Conducting Outreach	13
CBO's Fourth Goal for 2022 and 2023: Improving Internal Operations	14
Developing Employees' Skills	14
Maintaining and Improving Technological Infrastructure	15

Appendix A: Detailed Tables	17
Appendix B: Detailed Object Class Analysis	25
Basis for CBO’s Budget Estimates—Personnel Costs	25
Basis for CBO’s Budget Estimates—Nonpersonnel Costs	26
Appendix C: Key Staffing Changes and Organization Charts	29
Key Staffing Changes in 2021 and Early 2022	29
Organization Charts	29
Appendix D: CBO’s Products and Internal Operations in 2021	35
Technical Assistance	35
Cost Estimates and Mandate Statements	35
Scorekeeping Tabulations	35
Reports, Working Papers, and Testimony About the Budget and Economy	35
Strengthening Responsiveness	38
Enhancing Transparency	38
Staff Development	39
Contracts	39
Information Technology	40
About This Document	41

The Congressional Budget Office's Request for Appropriations for Fiscal Year 2023

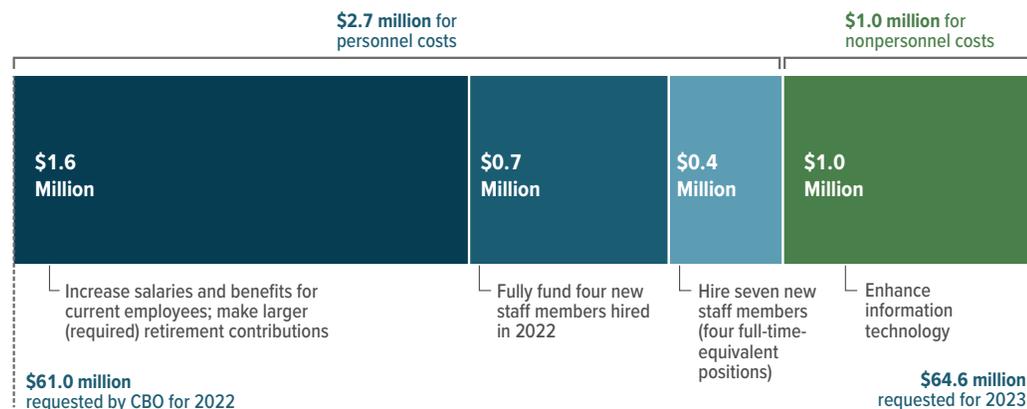
The Congressional Budget Office requests appropriations of \$64.6 million for fiscal year 2023. Of that amount, 90 percent would be for pay and benefits; 7 percent would be for information technology (IT), including tools to improve cybersecurity; and 3 percent would be for training, expert consultants, office supplies, and other items. The requested amount represents an increase of \$3.7 million, or 6.0 percent, from the \$61.0 million that CBO requested for 2022.

The requested budget is based on strong interest in CBO's work from Congressional leadership, committees, and Members. In 2021, the need to assess large and complex legislation—including the American Rescue Plan Act of 2021, the Infrastructure Investment and Jobs Act, and the Build Back Better Act of 2021—while continuing to evaluate the course of the coronavirus pandemic and its effects on the economy strained the agency's resources in many areas. In the future, significant legislative initiatives are likely to require additional resources. The budgetary increase that CBO is requesting would enable the agency to be even more responsive to Congressional needs by fully funding the staffing increase that is under way this year and by funding seven new staff members, or four full-time-equivalent positions (FTEs), in 2023:

- Four staff members to deliver more analysis of health care, climate change, and energy policy issues—areas in which CBO anticipates additional interest and legislative activity;
- Two staff members to support more senior analysts when demand surges for analysis of a particular topic or when additional assistance is needed for a complicated estimate; and
- One staff member to assist CBO's efforts in information technology.

Because so much of CBO's budget is devoted to personnel costs, if actual funding proves markedly less than the proposed amount, CBO will have to reduce the current size of its staff, affecting the agency's ability to be transparent and responsive.

Components of Requested \$3.7 Million Increase



CBO's Budget Request and Its Consequences for Staffing and Output

In fiscal year 2023, CBO will continue its mission of providing objective, insightful, clearly presented, and timely budgetary and economic information to the Congress. The \$64.6 million requested would be used mostly for salaries and benefits for personnel. (For more details, see Appendixes A and B.)

Funding Request for Personnel Costs and Consequences for Staffing

CBO requests \$57.9 million for salary and benefits to support 279 FTEs. That amount represents an increase of \$2.7 million, or 4.9 percent, from the \$55.2 million that CBO requested for fiscal year 2022. Of the \$2.7 million, \$2.3 million would support staff who were already on board at the end of fiscal year 2022.

Of the total requested amount:

- \$41.0 million would cover salaries—an increase of \$1.4 million, or 3.6 percent, from the amount requested for 2022. The requested increase would fund the hiring of seven new staff members in 2023 and fully fund staff members hired at various times throughout 2022. It would also provide for performance-based salary increases for current staff in 2023 and an across-the-board increase of 4.6 percent for employees earning less than \$100,000. (That group of employees would also be eligible for performance-based increases, whereas employees earning \$100,000 or more would be eligible to receive only performance-based increases.)
- \$16.9 million would fund benefits—an increase of \$1.3 million, or 8.3 percent, from the amount requested for 2022. The requested increase would cover an increase in the cost of federal benefits and fund benefits for the seven new staff members.

Funding Request for Nonpersonnel Costs

CBO requests \$6.7 million for costs other than personnel. Those funds would cover current IT operations—such as cybersecurity, software and hardware maintenance, software development, communications, and purchases of commercial data and equipment—and would pay for training, expert consultants, office supplies, travel, interagency agreements, facilities support, printing and editorial support, financial management operations (including auditing the agency's financial statements), subscriptions to library services, and other items.

The requested amount is \$1.0 million, or 16.8 percent, larger than the amount requested for 2022. That funding would, among other things, improve CBO's ability to assess, detect, and recover from internal and external cyber threats; continue to improve computing capabilities for many staff by migrating their workstations into cloud-based systems; enhance users' ability to conduct remote teleconferences; and fund the initial implementation costs of a system that would improve the agency's continuity of operations plans and enhance telework by its human resources staff.

Consequences for Output

The requested amount of funding would allow CBO to produce a great deal of valuable analysis for the Congress, including analysis in areas in which the agency anticipates additional legislative activity. It would also allow CBO to provide more technical assistance and faster turnarounds when demand surges. In addition to the major products shown below, CBO will continue to produce other important material, such as slide decks, interactive tools, and blog posts.

CBO regularly consults with committees and the Congressional leadership to ensure that its resources are focused on the work that is of highest priority to the Congress. Nevertheless, the demands on the agency remain intense and strain its resources in many areas. Even with high productivity by a dedicated staff, CBO expects that it will not be able to produce as many estimates and other analyses as committees, leadership, and individual Members request.

The Congressional Budget Office’s Major Products, Calendar Years 2021 to 2023

Type of Product	2021, Actual	2022, Estimate	2023, Estimate
Fulfilled Requests for Technical Assistance. Such requests typically come from committees and Members of Congress seeking a clear picture of the budgetary impact of proposals before they introduce or formally consider legislation.	Thousands	Thousands	Thousands
Formal Cost Estimates. Most include both estimates of federal costs and assessments of the cost of mandates imposed on state, local, and tribal governments or the private sector.	401	700	700
Estimates for Suspension Bills. For bills considered under suspension of the rules in the House of Representatives, CBO provides estimates of the bills’ effects on mandatory spending and revenues.	380	400	400
Scorekeeping Tabulations. Those tabulations include account-level estimates for individual appropriation acts at all stages of the legislative process, as well as summary tables showing the status of discretionary appropriations (by appropriations subcommittee) and running totals on a year-to-date basis.	100	100	100
Analytic Reports, Working Papers, and Testimony. Such publications are generally required by law or prepared in response to requests from the Chairs and Ranking Members of key committees. They examine the outlook for the budget and the economy, major issues affecting that outlook under current law, the budgetary effects of policy proposals that could change that outlook, the details of the federal budget process, and a broad range of related budgetary and economic topics in such areas as health care, defense policy, Social Security, and climate change.	79	70 to 80	70 to 80



CBO's Role in Support of the Congress

CBO was established under the Congressional Budget Act of 1974 to provide information that would support the Congressional budget process and help the Congress make effective budget and economic policy. CBO's work follows processes specified in that law and subsequent laws or developed over time by the agency in concert with the House and Senate Budget Committees and the Congressional leadership. The agency's chief responsibility under the Budget Act is to help the Budget Committees with the matters under their jurisdiction. CBO also supports other Congressional committees—particularly the Appropriations, Ways and Means, and Finance Committees, as the Budget Act requires—and the leadership of the House and Senate.

The agency is committed to providing information that is:

- Objective and insightful—representing the consensus of experts from around the country and the diversity of their views, and applying the best new evidence as well as the lessons of experience;
- Timely—responding as quickly as possible to the needs of the Congress; and
- Clearly presented and explained—so that policymakers and analysts understand the basis for the agency's findings and have the opportunity to question the analysis and methods used.

CBO strives to present the likely budgetary and economic consequences of proposals being considered by the Congress so that lawmakers can make informed policy choices. In keeping with CBO's mandate to provide analysis that is objective and impartial, the agency makes no policy recommendations.

CBO's Staffing

CBO employs analysts with many types of expertise who support the Congress in collaboration with managers and support staff. At the beginning of January 2022, 270 positions at CBO were filled. Health care was the field that occupied the most analysts.

For key staffing changes over the past year, as well as CBO's organization charts, see Appendix C.

Allocation of CBO Staff, January 2022

	Number of Staff
Principal Areas for Analysts	
Health	49
National Security, Veterans' Programs, International Affairs, and Immigration	26
Income Security, Labor, and Retirement	25
Energy, Environment, Natural Resources, and Transportation	21
Taxation	20
Macroeconomics	19
Finance, Housing, and Education	17
Appropriations	10
Budget Outlook	10
Mandates	6
Commerce, Justice, Science, and General Government	2
Principal Types of Activities for Other Staff	
Information Technology	15
Editing and Publishing	13
Human Resources, Financial Management, and Other Support	12
General Management	8
Clerical Support	6
Legal Services	5
Website	4
Interns	2
Total	270

Recommendations to Report

The Good Accounting Obligation in Government Act requires agencies' budget requests to report public recommendations made by the Government Accountability Office or by an office of inspector general. There are currently no such recommendations for CBO to report.



Highlights of CBO's Work in 2021

In calendar year 2021, another year of unprecedented legislation and a remote work environment caused by the coronavirus pandemic, CBO continued to provide analysis to the Congress efficiently. For a full review of CBO's work in 2021, see Appendix D.

Analyzing Major Legislation

CBO provided assistance and estimates at every stage of the legislative process for the American Rescue Plan Act of 2021, the Infrastructure Investment and Jobs Act, and the Build Back Better Act of 2021—always with the goal of providing information when it was most useful to the Congress. CBO's contributions related to those bills included the following:

- Technical assistance (including responses to thousands of requests for preliminary estimates) to staff members of various House and Senate committees and in leadership offices as they developed legislative proposals;
- Cost estimates numbering in the hundreds of pages;
- Feedback on hundreds of amendments before they were considered on the floor; and
- Tables summarizing the bills' budgetary effects.

Meeting Other Legislative Needs of the Congress

CBO carried out much other work as well, often under tight time constraints. It responded to thousands of other requests for technical assistance (including providing information about the budgetary effects of proposed amendments to legislation), prepared hundreds of other cost estimates, and compiled 100 scorekeeping tabulations.

To take one example, as part of its review of H.R. 4350, the National Defense Authorization Act for Fiscal Year 2022, CBO prepared a cost estimate and reviewed nearly 3,000 amendments. Of those, 785 amendments were reviewed when the bill was being considered by the House Armed Services Committee, 1,070 (submitted by 352 Members of the House) were reviewed before the bill was considered on the House floor, and 995 (submitted by 98 Senators) were reviewed before consideration on the Senate floor.

CBO reviewed 380 bills in 2021 that were scheduled to be considered on the House's suspension calendar (which is generally used to handle noncontroversial bills that are expected to pass quickly and with little debate). Starting in June 2021, as part of its ongoing efforts to be transparent, CBO began posting those reviews on its website. Before then, CBO transmitted the effects of suspension bills on mandatory spending and revenues directly to the Majority and Minority Leaders of the House of Representatives and the House Committee on the Budget.

Performing Budgetary and Economic Analysis

CBO released two full sets of budget and economic projections, one in February and another in July—taking into account, among other things, the most recent developments in the pandemic as well as the budgetary and economic effects of the American Rescue Plan Act once it was enacted. The agency also released its annual long-term budget projections.

With the budget and economic projections used as benchmarks in most of its analyses, CBO published analytic reports, working papers, and other documents. The reports examined military pay, estate and gift taxes, the effects of physical infrastructure spending on the economy, a public option for health insurance, the minimum wage, budgeting for federal investment, and many other topics. In providing all of that information, CBO aimed to be as timely and transparent as possible.

All told, CBO prepared 79 analytic reports, working papers, and testimonies, as well as other important material, such as slide decks, interactive tools, and blog posts.



CBO's First Goal for 2022 and 2023: Providing Budgetary and Economic Information That Is Objective and Insightful

In 2022 and 2023, CBO will ensure, as it has throughout its history, that its work is objective and insightful. The agency will continue its practice of making no policy recommendations and will continue to strive to present the likely consequences of alternative policy proposals.

Many of the products that CBO will produce in the next two years are specified by statute—for example, an annual report on the outlook for the budget and the economy and cost estimates for bills reported by committees. CBO's other analyses address issues being considered by the Congress, provide background information on budgetary and economic conditions that are relevant for the consideration of legislation, or explain the tools that the agency uses in making projections and estimates. Accordingly, the specific projects that CBO undertakes this year and next will depend on CBO's budget, on the legislative agenda, and on requests from Congressional committees and leadership. CBO regularly consults with Members and staff about what topics and types of analyses would be most valuable to the Congress, and the agency responds as rapidly as possible to Congressional interest.

The analyses requested by the Congress at times involve new and complex issues; even for recurring issues, a constantly changing context creates new challenges. CBO expends substantial resources to understand the substance underlying policy issues and estimate the budgetary and economic impact of legislative proposals. Many of CBO's analyses involve assembling evidence from numerous sources, synthesizing the implications of that evidence, and building models to quantify effects of specific proposals and variations of them.

To be ready to provide timely responses to requests, the agency makes ongoing investments in that process. For example, CBO is currently improving its capability to analyze the effects of proposed climate change legislation on the economy and the federal budget. CBO is also improving its capability to analyze the effect of proposed legislation on people in different demographic and income groups.

Fulfilling Requests for Technical Assistance

At various stages of the legislative process, CBO will provide Congressional committees with technical assistance related to the budgetary impact of proposed legislation. To the extent practicable, CBO will also provide information to Members' offices.

Providing Cost Estimates and Mandate Statements

CBO will provide formal cost estimates to fulfill the statutory requirement to supply estimates of the cost of bills reported by committees. Upon request, CBO will also provide formal cost estimates at other stages of the legislative process. Most of those cost estimates will include estimates of the effects of intergovernmental and private-sector mandates. In addition, for bills considered under suspension of the rules in the House of Representatives, CBO will provide estimates of the effects on mandatory spending and revenues.

Producing Estimates for Appropriation Bills

CBO will estimate the budgetary impact of appropriation bills and provide regular status reports on discretionary appropriations and on the effects of legislation on mandatory spending and revenues.

Publishing Reports, Working Papers, and Testimony About the Budget and Economy

CBO will produce comprehensive reports about the outlook for the budget and the economy, describing the agency's baseline budget and economic projections and the basis for them. Working papers will provide additional detail on the budgetary and economic trends underlying the projections. For example, CBO's analysts will prepare one working paper explaining how the agency projects the maturity structure of Treasury securities and another analyzing how health insurance coverage expansions affect the use of health care by people not directly affected by the expansions. In addition, CBO will estimate the effects of the President's budgetary proposals on the budget and the economy.

CBO will also report on the long-term budget outlook, examining how Social Security, Medicare, Medicaid, and other parts of the federal budget are likely to be affected over the coming decades by the aging of the population and growth in the cost of health care per person. And CBO will examine specific issues, such as the long-term costs of the Defense Department's personnel plans and the costs of the Navy's shipbuilding plans.

Furthermore, the agency will provide in-depth analyses of various issues, responding to the interests and concerns of Congressional committees and leadership. Those analyses will address broad budget issues and an array of other topics, including health care, income security, education, macroeconomic conditions and problems, trade, financial markets, credit programs, taxes, national security, energy, climate change, and infrastructure. Also, CBO will publish its periodic report describing policy options that would reduce the deficit over the coming decade.

CBO's Second Goal for 2022 and 2023: Strengthening Responsiveness

CBO seeks to provide information at the time when it is most useful to the Congress. Depending on its purpose, that information takes a variety of forms, such as cost estimates, background information, and technical assistance. In most cases, CBO completes a formal cost estimate before legislation comes to a floor vote. In addition, the agency works to provide technical assistance, reports, and other information to lawmakers and their staff during earlier stages of the legislative process.

Beginning in fiscal year 2019, the Congress increased CBO's budget in part to allow the agency to implement a plan to strengthen its responsiveness to the Congress. To carry out that plan, CBO has expanded staffing in high-demand areas, such as health care and immigration. It has increased its use of assistant analysts, who can move from one topic to another to support more senior analysts when demand surges for analysis of a particular topic or when additional assistance is needed for a complicated estimate. In addition, CBO is engaging expert consultants in complex areas, such as health policy, economic forecasting, and climate-related research. Finally, the agency is continuing to expand its use of team approaches for large and complicated projects. That approach has been particularly effective in enabling CBO to produce timely analysis of legislation involving health care.

CBO's goal is to increase the number of staff with overlapping skills within and across teams. In some cases, those skills will consist of expertise related to particular topics, such as defense or transportation. In other cases, they will be more technical, such as the ability to design and improve simulation models. In a similar vein, CBO plans to invest additional resources in bolstering analysts' ability to coordinate work that requires expertise from across the agency. Another of CBO's goals is to give additional senior analysts responsibility for projects that span multiple subject areas.

The budgetary increase that CBO is requesting would allow it to maintain its efforts to be responsive, particularly in two important areas of analysis. In 2022 and 2023, CBO plans to hire additional staff who will increase the agency's expertise and modeling capability in the areas of health care, climate change, and energy policy—areas in which CBO expects the Congress to show increased interest.

CBO's Third Goal for 2022 and 2023: Enhancing Transparency

CBO works hard to make its analysis transparent and plans to strengthen those efforts, building on the increased emphasis that it has placed on transparency over the past several years. In 2022 and 2023, many of CBO's employees will spend part of their time on efforts to make the agency's analysis more transparent.

Testifying and Publishing Answers to Questions

In 2022 and 2023, CBO expects to testify about its baseline projections and other topics as requested by the Congress. That work will involve presenting oral remarks, answering questions at hearings, and presenting written statements, as well as publishing answers to Members' questions for the record. CBO will continue to address issues raised as part of the oversight provided by the House and Senate Budget Committees and the Congress generally.

Explaining Analytical Methods

CBO plans to publish material providing general information to help Members of Congress, their staffs, and others better understand its work. For example, CBO will document a new version of its model for producing long-term projections, one that can analyze a greater variety of policy proposals more quickly. And CBO will publish working papers and, in some cases, the computer code used in models.

Releasing Data

In 2022 and 2023, CBO will maintain its practice of publishing extensive sets of data to accompany its major recurring reports, including detailed information about 10-year budget projections, historical budget outcomes, 10-year projections for federal trust funds, revenue projections by category, spending projections by budget account, tax parameters, effective marginal tax rates on labor and capital, and 10-year projections of economic variables, including the economy's potential (or sustainable) output.

The agency will also provide details about its baseline projections for the Federal Pell Grant Program, student loan programs, Medicare, the military retirement program, the pension benefit guarantee program, the Social Security Disability Insurance program, the Social Security Old-Age and Survivors Insurance program, the trust funds for Social Security, child nutrition programs, child support enforcement and collections, foster care and adoption assistance programs, the Supplemental Nutrition Assistance Program, the Supplemental Security Income program, the Temporary Assistance for Needy Families program, the unemployment compensation program, the Department of Agriculture's mandatory farm programs, federal programs that guarantee mortgages, programs funded by the Highway Trust Fund, benefits for veterans and military personnel stemming from the Post-9/11 GI Bill, and veterans' disability compensation and pension programs.

Other data will provide details about long-term budget projections, projections underlying Social Security estimates, more than a thousand expired or expiring authorizations of appropriations, and dozens of federal credit programs. When CBO analyzes the President's budget request, it will post a set of files providing estimates of the budgetary effects of specific proposals. Throughout 2022 and 2023, the agency will post the data from various reports' charts and tables.

Analyzing the Accuracy of CBO's Estimates

In 2022 and 2023, CBO will continue to release reports analyzing the accuracy of its past projections of outlays, revenues, deficits, and debt. And the agency will compare its projections of federal subsidies for health insurance with actual amounts.

Comparing Current Estimates With Previous Ones

In several of its recurring publications—reports about the budget and economic outlook, federal subsidies for health insurance, and the long-term budget outlook—CBO will continue to explain the differences between the current year's projections and those produced in the previous year. In its cost estimates, CBO will continue to identify related legislative provisions for which it has provided recent estimates and explain the extent to which the provisions and estimates at hand are similar or different.

Comparing CBO's Estimates With Those of Other Organizations

CBO will compare its budget projections with the Administration's and its economic projections with those of private forecasters and other government agencies when possible. And in various reports, the agency will include comparisons of its estimates with estimates made by other organizations. In addition, when time does not allow for publication but interest is high, analysts will discuss such comparisons with Congressional staff.

Estimating the Effects of Policy Alternatives

In 2022 and 2023, CBO will update some of its interactive products and release new ones to help users understand the effects of potential changes to federal policies. Reports will also illustrate the potential effects of various policy proposals.

Characterizing the Uncertainty of Estimates

CBO will update an interactive workbook showing its estimates of how changes in economic conditions affect the federal budget. The agency's reports about the 10-year outlook for the budget and the economy, the long-term outlook for the budget, and federal subsidies for health insurance will contain substantial discussions of the uncertainty of CBO's projections. In addition, in any cost estimates in which uncertainty is significant, CBO will include a discussion of the topic.

Creating Data Visualizations

In 2022 and 2023, CBO will provide information about its budget and economic projections in slide decks and create infographics about actual outlays and revenues. And the agency will look for opportunities to include graphics to enhance the explanations in some cost estimates.

Conducting Outreach

CBO will continue to communicate every day with Congressional staff and others outside the agency to explain its findings and methods, respond to questions, and obtain feedback. The agency's Director will meet regularly with Members of Congress to do the same. After each set of baseline projections is published, CBO's staff will meet with Congressional staff to discuss the projections and answer questions.

CBO will obtain input from its Panel of Economic Advisers, its Panel of Health Advisers, and other experts. Many reports will benefit from written comments by outside experts on preliminary versions. For some recurring reports produced on compressed timetables, such as the one about CBO's long-term budget projections, the agency will solicit comments on previous publications and selected technical issues to incorporate improvements in future editions.

CBO's staff will give presentations on Capitol Hill—some in collaboration with Congressional committees and the Congressional Research Service—on CBO's budget and economic projections and on other topics. Those presentations will allow CBO to explain its work and answer questions. The agency will also give presentations about its findings and about work in progress in a variety of venues to offer explanations and gather feedback. In addition, CBO will use blog posts to summarize and highlight various issues.

CBO's Fourth Goal for 2022 and 2023: Improving Internal Operations

In addition to directly serving the Congress, CBO devotes resources to developing employees' skills and providing technological infrastructure to help them be as productive as possible.

Developing Employees' Skills

CBO will keep focusing on staff development in 2022 and 2023. Because the agency has increased hiring during the past three years, it has more new employees than usual, making staff development especially important. Also, the agency is experiencing record numbers of retirements, so it is focusing on knowledge transfer. Furthermore, CBO is working to address the pent-up need for several routine staff development efforts that were delayed by the pandemic.

CBO will continue to enhance the knowledge and skills of its staff by funding participation in conferences of researchers, practitioners, and government employees on various economic and policy topics, as well as training in analytic tools and various skills. Knowledge transfer and the development of leadership skills will be prioritized to aid CBO's efforts in succession planning and continuity of operations. CBO will also continue to provide courses on writing, effective presentation skills, and graphics to ensure that its work is as well communicated and as useful as possible. To remain fiscally prudent, CBO continues to develop employees' skills by means of internal resources and those of sister agencies when it can. The remote work environment has made staff development more difficult during the pandemic, so some training has been delayed or will require additional effort or funding so that it can be redesigned for virtual delivery.

CBO is repeating its request from the past year for a modest appropriation of no-year funds (that is, funds that would remain available until exhausted) to facilitate analysts' participation in annual leading academic conferences that occur early in the fiscal year, including conferences focused on tax policy, health care policy, and economics. In addition to offering analysts professional development, such conferences are where CBO does much of its recruiting for economists. In the past, the agency has encountered difficulty in registering staff members for those conferences and arranging for travel because registration begins during the previous fiscal year. The requested appropriation (\$45,000) would make planning for the conferences more efficient and in some cases would allow CBO to obtain discounts.

Maintaining and Improving Technological Infrastructure

CBO continually works to maintain and improve its technological infrastructure, including technologies that support a hybrid work environment. In 2022 and 2023, the agency plans to:

- Continue to update and transform desktop computers and file storage to increase capabilities, enhance ease of use, and improve disaster recovery capability;
- Continue to improve its ability to assess, detect, and recover from internal and external cyber threats by upgrading, replacing, and adding certain software and systems and by testing the systems' capabilities to withstand attacks via the network or malicious email;
- Continue to improve computing capabilities for many staff by shifting their workstations into cloud-based systems;
- Continue to enhance users' ability to conduct remote teleconferences;
- Improve network connections and the diversity of vendors to ensure that those connections remain resilient and available to support long-term remote work capabilities;
- Continue to invest in cloud computing technologies and further reduce on-premise operations;
- Continue to implement enhanced security systems so that employees can access certain Microsoft 365 tools remotely; and
- Implement endpoint threat detection and response to guard against advanced, persistent threats and ransomware.

Appendix A: Detailed Tables

Tables A-1 through A-8 provide a detailed breakdown of the Congressional Budget Office's past budgets and requested appropriations for fiscal year 2023. Tables A-9 and A-10 provide additional information.

Table A-1.

Summary of Salaries and Expenses Appropriation, by Organizational Unit

Thousands of Dollars

Organizational Unit	FY 2021, Actual		FY 2022, Requested		FY 2023, Requested		Change From FY 2022, Requested, to FY 2023, Requested		
	FTEs ^a	Funding	FTEs	Funding	FTEs	Funding	FTEs	Amount	Percentage
Office of the Director ^b	19	3,861	20	4,229	20	4,377	0	148	3.5
Budget Analysis	90	17,521	89	17,932	90	18,737	1	805	4.5
Financial Analysis	10	1,954	10	2,032	10	2,101	0	69	3.4
Health Analysis	30	5,853	30	6,047	31	6,460	1	413	6.8
Labor, Income Security, and Long-Term Analysis	13	2,526	19	3,830	19	3,960	0	130	3.4
Macroeconomic Analysis	18	3,512	19	3,852	19	3,982	0	130	3.4
Management, Business, and Information Services	43	13,401	41	13,296	42	14,753	1	1,457	11.0
Microeconomic Studies	12	2,413	14	3,070	15	3,373	1	303	9.9
National Security	13	2,532	13	2,634	13	2,726	0	92	3.5
Tax Analysis	19	3,695	20	4,031	20	4,168	0	137	3.4
Total	267	57,268	275	60,953	279	64,637	4	3,684	6.0

FTE = full-time-equivalent position; FY = fiscal year.

a. Cumulative number of FTEs over the course of the year.

b. Includes the Office of Communications and the Office of the General Counsel.

Table A-2.

Summary of Salaries and Expenses Appropriation, by Object Class

Thousands of Dollars

Object Class	CBO Activities	FY 2021, Actual	FY 2022, Requested	FY 2023, Requested	Change From FY 2022, Requested, to FY 2023, Requested	
					Amount	Percentage
11.1	Full-Time Permanent Positions	35,324	37,324	38,491	1,167	3.1
11.3	Other Than Full-Time Permanent	1,374	1,495	1,752	257	17.2
11.5	Other Personnel Compensation (Performance awards)	723	750	750	0	0
11.5	Other Personnel Compensation (Overtime)	32	30	30	0	0
12.1	Personnel Benefits	14,419	15,584	16,872	1,288	8.3
	Total, Pay	51,872	55,183	57,895	2,712	4.9
21.0	Travel and Transportation of Persons	7	192	192	0	0
23.3	Communications, Utilities, and Miscellaneous Charges	426	407	603	196	48.2
24.0	Printing and Reproduction	0	38	39	1	2.6
25.0	Other Services	3,938	4,301	5,039	738	17.2
26.0	Supplies and Materials	436	459	456	-3	-0.7
31.0	Equipment	589	373	413	40	10.7
	Total, Nonpay	5,396	5,770	6,742	972	16.8
	Total	57,268	60,953	64,637	3,684	6.0

FY = fiscal year.

Table A-3.

**Summary of Salaries and Expenses Appropriation, by Object Class,
With Appropriation Under the FY 2022 Continuing Resolution (Annualized)**

Thousands of Dollars

Object Class	CBO Activities	FY 2021, Actual	FY 2022, Continuing Resolution (Annualized)	FY 2022, Requested	FY 2023, Requested	Change From FY 2022, Requested, to FY 2023, Requested	
						Amount	Percentage
11.1	Full-Time Permanent Positions	35,324	34,810	37,324	38,491	1,167	3.1
11.3	Other Than Full-Time Permanent	1,374	1,481	1,495	1,752	257	17.2
11.5	Other Personnel Compensation (Performance awards)	723	700	750	750	0	0
11.5	Other Personnel Compensation (Overtime)	32	45	30	30	0	0
12.1	Personnel Benefits	14,419	15,049	15,584	16,872	1,288	8.3
	Total, Pay	51,872	52,085	55,183	57,895	2,712	4.9
21.0	Travel and Transportation of Persons	7	191	192	192	0	0
23.3	Communications, Utilities, and Miscellaneous Charges	426	375	407	603	196	48.2
24.0	Printing and Reproduction	0	38	38	39	1	2.6
25.0	Other Services	3,938	3,862	4,301	5,039	738	17.2
26.0	Supplies and Materials	436	472	459	456	-3	-0.7
31.0	Equipment	589	269	373	413	40	10.7
	Total, Nonpay	5,396	5,207	5,770	6,742	972	16.8
	Total	57,268	57,292	60,953	64,637	3,684	6.0

FY = fiscal year.

Table A-4.

Salaries and Expenses Appropriation: Analysis of Change

	FTEs	Requested Amount (Thousands of dollars)
Funding for FY 2022, Requested	275	60,953
Mandatory Pay and Related Costs		
FY 2023 performance increases (Pay only)		652
Annualization of prior FY personnel actions (Pay only)		509
Personnel additions (Pay only)	4	324
FY 2023 across-the-board pay adjustment (Pay only)		71
Increase in other than full-time permanent (Pay only)		23
One fewer workday than in FY 2022 (Pay only)		-155
Other benefit changes (Benefits)		1,232
Personnel additions (Benefits)		108
One fewer workday than in FY 2022 (Benefits)		-52
Total, Mandatory Pay and Related Costs	4	2,712
Price-Level Changes		
Price increases		162
Total, Price-Level Changes		162
Program Changes		
Increase in communications		170
Increase in other services		692
Increase in printing and reproduction		1
Decrease in equipment		-50
Decrease in supplies and materials		-3
Total, Program Changes		810
Net Increase or Decrease	4	3,684
Funding for FY 2023, Requested	279	64,637

FTE = full-time-equivalent position; FY = fiscal year.

Table A-5.

Staffing Summary

Organizational Unit	FY 2021, Actual		FY 2022, Requested FTEs ^c	FY 2023, Requested FTEs ^c	Change in FTEs From FY 2022, Requested, to FY 2023, Requested
	Number of Employees ^a	FTEs ^b			
Office of the Director ^d	19	19	20	20	0
Budget Analysis	92	90	89	90	1
Financial Analysis	9	10	10	10	0
Health Analysis	27	30	30	31	1
Labor, Income Security, and Long-Term Analysis	20	13	19	19	0
Macroeconomic Analysis	20	18	19	19	0
Management, Business, and Information Services	42	43	41	42	1
Microeconomic Studies	11	12	14	15	1
National Security	13	13	13	13	0
Tax Analysis	20	19	20	20	0
Total	273	267	275	279	4

FTE = full-time-equivalent position; FY = fiscal year.

a. Number of employees at the end of the year.

b. Cumulative number of FTEs over the course of the year.

c. Based on the number of employees projected for the end of the previous year, minus projected terminations and plus projected hires for the specified year, and allowing for lag time between terminations and hires.

d. Includes the Office of Communications and the Office of the General Counsel.

Table A-6.

Supplemental Data on Mandatory Pay Increases in CBO's Request

Thousands of Dollars

Category	Amount	Explanation of Calculation
FY 2023 Performance Increases (Pay only)	652	CBO uses a performance-based system to reward its employees. Performance-based increases are based on employees' accomplishments in the previous year, as reflected in annual performance reviews. Performance is assessed according to five criteria: quality of work, timeliness and productivity, initiative, written and oral communication skills, and effectiveness of working relationships. Managers' performance is also assessed according to a sixth criterion, leadership. CBO's Director makes the final decisions on all pay changes. Maintaining the ability to reward performance is essential in view of the competitive job markets for economists, budget analysts, and other professionals.
Annualization of Prior FY Personnel Actions (Pay only)	509	CBO annualized FY 2022 actions to include promotions and performance-based increases for staff.
Personnel Additions (Pay only)	324	CBO added pay for four additional FTEs.
FY 2023 Across-the-Board Pay Adjustment (Pay only)	71	Funding for a projected 4.6 percent across-the-board pay increase in January 2023 for staff whose salary is less than \$100,000 (if such an increase is authorized for executive branch agencies).
Increase in Other Than Full-Time Permanent (Pay only)	23	Funding to support an increase in costs for employees other than full-time permanent employees.
One Fewer Workday Than in FY 2022 (Pay only)	-155	CBO decreased pay needs because there will be 260 compensable days in FY 2023, one fewer than the 261 compensable days in FY 2022.
Personnel Benefit Changes Under Current Law (Benefits)	1,232	The estimated cost of the change in benefits associated with the salary increases listed above, plus rising prices for benefits.
Personnel Additions (Benefits)	108	CBO added benefits for four additional FTEs.
One Fewer Workday Than in FY 2022 (Benefits)	-52	CBO decreased benefits needs because there will be 260 compensable days in FY 2023, one fewer than the 261 compensable days in FY 2022.
Total, Mandatory Pay Increases	2,712	

FTE = full-time-equivalent position; FY = fiscal year.

Table A-7.

Supplemental Data on Price-Level Increases in CBO's Request

Thousands of Dollars

Category	Amount	Explanation of Calculation
General Inflationary Increase	162	CBO included an adjustment of 2.8 percent to match its projection of inflation costs for nonpay items.
Total, Price-Level Increase	162	

Table A-8.

Salaries and Expenses Obligations: 10-Year Data

Thousands of Dollars, Not Adjusted for Inflation, by Fiscal Year

Object Class	CBO Activities	2014	2015	2016	2017	2018	2019	2020	2021	2022, Requested	2023, Requested
11.1	Full-Time Permanent Positions	28,200	28,891	29,368	30,120	30,650	32,342	34,273	35,324	37,324	38,491
11.3	Other Than Full-Time Permanent	818	877	778	895	909	1,117	1,316	1,374	1,495	1,752
11.5	Other Personnel Compensation	583	542	567	447	643	688	817	755	780	780
	Subtotal	29,601	30,310	30,713	31,462	32,202	34,147	36,406	37,453	39,599	41,023
12.1	Personnel Benefits	9,752	10,433	10,807	11,107	11,245	11,873	14,002	14,416	15,584	16,872
13.0	Benefits for Former Personnel	0	0	0	6	0	0	0	3	0	0
21.0	Travel and Transportation of Persons	123	185	194	148	175	173	72	7	192	192
23.3	Communications, Utilities, and Miscellaneous Charges	318	298	186	241	523	366	436	426	407	603
24.0	Printing and Reproduction	29	31	19	19	11	28	4	0	38	39
25.0	Other Services	2,445	2,313	2,443	2,185	4,779	3,298	3,202	3,938	4,301	5,039
26.0	Supplies and Materials	422	407	423	383	433	426	380	436	459	456
31.0	Equipment	2,293	1,699	1,635	919	541	405	429	589	373	413
	Total, Obligations	44,983	45,676	46,420	46,470	49,909	50,716	54,931	57,268	60,953	64,637
	Full-Time-Equivalent Positions	225	233	233	237	237	249	261	267	275	279

Table A-9.

Spending for Advertising Services, Fiscal Year 2021

Dollars

Purpose of Spending	Vendor ^a	Obligations
Recruitment Advertisements for Health Economists	Academy of Health	299
Recruitment Advertisements for Economists	American Economic Association	1,500
Recruitment Advertisement for Budget Analysts	Association for Public Policy Analysis and Management	250
Recruitment Advertisements for Information Technology Positions	Dice	1,285
Recruitment Advertisement for Interns	Intern Jobs	30
Recruitment Advertisements for Health Economists	International Health Economics	50
Recruitment Advertisement for Defense Analyst	Military Operations Research Society	350
Recruitment Advertisement for Economists	National Association for Business Economics	99
Recruitment Advertisement for Economists	National Economic Association	300
Recruitment Advertisement for Human Resources Position	Northern Virginia Society for Human Resource Management	99
Recruitment Advertisement for Defense Analyst	Public Service Careers	250
Recruitment Advertisement for Leadership Positions	Society for Human Resource Management	299
Total		4,811

a. CBO did not collect socioeconomic information about these vendors because the amounts spent were small.

Table A-10.

Projected Recruitment Expenses, Fiscal Year 2022

Dollars

Projected Recruitment Advertising Needs	Potential Vendor^a	Expected Obligations
Recruitment Advertisements for Health Economists	Academy of Health	306
Recruitment Advertisements for Economists	American Economic Association	1,535
Recruitment Advertisement for Budget Analysts	Association for Public Policy Analysis and Management	256
Recruitment Advertisements for Health Economists	International Health Economics	51
Recruitment Advertisement for Economists	National Association for Business Economics	101
Recruitment Advertisement for Economists	National Economic Association	307
Recruitment Advertisement for Budget Analysts	Public Service Careers	256
Total		2,812

a. CBO does not collect socioeconomic information about these vendors because the amounts spent are small.

Appendix B: Detailed Object Class Analysis

The details of the Congressional Budget Office's requested appropriation for fiscal year 2023 are explained below.

Basis for CBO's Budget Estimates—Personnel Costs

CBO derived these projections of personnel costs with its internally developed software for tracking current payroll costs and projecting future payroll costs. The projections are based on employee-level payroll data at the object class level. In the past, payroll budget projections derived with that software have proved to be highly accurate.

Object Class 11—Full-Time and Part-Time Employees: \$41,023,100

- \$39,918,100 for Base Pay—funds an average of 279 full-time-equivalent positions (FTEs) for the fiscal year. That amount constitutes an overall net increase of \$1,424,300 from the amount requested for fiscal year 2022. Of the increase:
 - \$652,300 is for performance-based pay increases in 2023. CBO uses a performance-based system to reward its employees. Performance-based increases are based on employees' accomplishments in the previous year, as reflected in annual performance reviews. Employees' performance is assessed according to five criteria: quality of work, timeliness and productivity, initiative, written and oral communication skills, and effectiveness of working relationships. Managers' performance is also assessed according to a sixth criterion, leadership. CBO's Director makes the final decisions on all pay changes. Maintaining the ability to reward performance is essential in view of the competitive job markets for economists, budget analysts, and other professionals.
 - \$509,000 is for prior-year personnel actions (performance-based increases and promotions).
 - \$324,000 supports an increase of 4 FTEs in 2023. That number of FTEs represents 7 staff members hired during 2023.
 - \$71,000 is for an across-the-board pay increase (if such an increase is authorized for executive branch

agencies for 2023) of 4.6 percent in January 2023 for staff whose salary is less than \$100,000.

- \$23,000 is for performance-based pay increases in 2023 for employees other than full-time permanent employees.
- -\$155,000 is for one fewer workday than in fiscal year 2022.
- \$750,000 for Performance Bonuses for Top Performers—funds bonuses that enable CBO to control long-term compensation costs while helping the agency retain its outstanding performers in competitive job markets. The same amount was requested for fiscal year 2022.
- \$325,000 for Leave Buyout Costs—funds mandatory leave buyout costs for employees who depart. That amount, which is based on current data and projected departures, is the same as the amount requested for fiscal year 2022. If leave buyout costs turned out to be higher than that amount, CBO would delay filling vacated positions to cover the costs.
- \$30,000 for Overtime Pay—funds overtime pay for nonexempt employees. That amount is the same as the amount requested for fiscal year 2022. Currently, CBO has 11 employees serving in nonexempt positions. They perform such tasks as preparing and printing products, delivering them to the Congress, and providing technical support. CBO must pay employees in nonexempt positions overtime if they work more than 40 hours per week, which happens in the rare cases when timely support of the Congress would be impaired if the work was not performed.

Object Class 12—Personnel Benefits: \$16,871,600

- \$8,876,500 for the Federal Employees Retirement System (FERS) and Civil Service Retirement System (CSRS)—funds mandatory retirement benefits in FERS and CSRS. That amount, which constitutes an increase of \$950,100 from the amount requested for fiscal year 2022, is based on several factors: the projected base pay of current employees; anticipated

hires and attrition; and an increase of 0.5 percentage points over current benefit rates (which are 25.8 percent for FERS employees generally, 7.5 percent for CSRS and CSRS Offset employees, and 16.6 percent for employees new to government after December 31, 2012) to plan for an anticipated increase in those rates. Benefit rates are the percentage of employees' salaries that CBO is required to pay to the two retirement systems.

- **\$2,644,900 for Health Insurance**—funds mandatory health benefit costs. That amount constitutes an increase of \$184,100 from the amount requested for fiscal year 2022. The increase results from increases in premiums for health insurance and in the size of CBO's staff.
- **\$2,305,300 for Social Security Payroll Taxes**—funds mandatory benefit costs for CBO employees subject to the Social Security payroll tax. That amount, which constitutes an increase of \$84,300 from the amount requested for fiscal year 2022, is projected on the basis of an estimated maximum taxable amount of \$151,300 for each employee, along with a reduction for anticipated attrition.
- **\$1,473,600 for FERS Thrift Savings Plan (TSP) Government Matching Contributions**—funds mandatory government matching contributions. That amount, which constitutes an increase of \$27,900 from the amount requested for fiscal year 2022, is projected on the basis of matching benefits for current employees, their current annualized salary, and a reduction for anticipated attrition. The historical matching benefit for CBO has been roughly 3.7 percent of base pay.
- **\$595,500 for Medicare Payroll Taxes**—funds mandatory benefit costs for CBO employees. That amount, which constitutes an increase of \$20,400 from the amount requested for fiscal year 2022, equals 1.45 percent of base pay, with a reduction for anticipated attrition.
- **\$394,700 for the FERS TSP Government Basic Contribution**—funds the mandatory FERS TSP matching benefit of 1 percent. That amount, which constitutes an increase of \$14,900 from the amount requested for fiscal year 2022, is projected on the basis of the benefits paid to current employees, their current annualized salary, and a reduction for anticipated attrition.
- **\$250,000 for the Transit Benefit Program**—funds mandatory employee benefits that are associated with CBO's Transit Benefit Program. The same amount was requested for fiscal year 2022.
- **\$150,000 for Recruitment Bonuses**—funds a valuable recruiting tool for the agency. The same amount was requested for fiscal year 2022.
- **\$100,000 for Death Benefits**—funds death benefits. The same amount was requested for fiscal year 2022.
- **\$57,100 for Life Insurance**—funds mandatory life insurance benefits for employees. That amount, which constitutes an increase of \$5,000 from the amount requested for fiscal year 2022, is projected on the basis of historical data and equals 0.14 percent of base pay.
- **\$18,000 for the Student Loan Repayment Program**—funds a valuable recruiting tool for the agency. The same amount was requested for fiscal year 2022.
- **\$6,000 for the Federal Flexible Spending Account Program (FSAFEDS)**—funds mandatory costs for FSAFEDS. That amount, which is an increase of \$4,300 from the amount requested for fiscal year 2022, is projected on the basis of employees' historical use of the program.
- **\$0 for Workers' Compensation**—there will be no mandatory payments of workers' compensation claims in fiscal year 2022. That amount is a decrease of \$3,200 from the amount requested for fiscal year 2022.

Basis for CBO's Budget Estimates—Nonpersonnel Costs

CBO projected nonpersonnel costs on the basis of its past experience and plans for the upcoming year.

Object Class 21—Travel: \$192,000

- **\$192,000 for Travel**—funds travel for the outside experts who participate in two meetings of the agency's Panel of Economic Advisers and one meeting of the agency's Panel of Health Advisers to support the development and review of the agency's analyses; funds employees' attendance at the annual Allied Social Science Association conference, which is an important venue for recruiting; and funds travel for employees to attend various conferences and training courses, including management and leadership

training. The amount is based on anticipated requirements and is the same as the amount requested for fiscal year 2022. (In 2022, travel during the pandemic continues to be limited, and the savings fund pandemic-related costs.)

Object Class 23.3—Communications, Utilities, and Miscellaneous Charges: \$603,100

- **\$598,600 for Telecommunications and Telephone Services**—funds local and long distance telephone services, smartphone service for some CBO personnel, and secure telecommunication links to support Internet and intranet services. Those links and services between the agency's offices at the Ford House Office Building and its secondary data center enable CBO's information technology (IT) staff to conduct daily administrative tasks and to replicate data and systems at both locations daily so that if a disaster occurred at the Ford Building, the agency could keep operating at the other location. The amount is an increase of \$196,100 from the amount requested for fiscal year 2022.
- **\$4,500 for Mail Service**—funds postage, couriers, and mail services. The amount is based on anticipated requirements and is a decrease of \$100 from the amount requested for fiscal year 2022.

Object Class 24—Printing and Reproduction: \$39,200

- **\$39,200 for Publications**—funds the printing of publications through the Government Publishing Office, as well as other miscellaneous printing requirements involving CBO's products for the Congress. The amount is based on anticipated requirements and is an increase of \$900 from the amount requested for fiscal year 2022.

Object Class 25—Other Services: \$5,039,400

- **\$2,658,300 for IT Commercial Data and Time Sharing**—funds purchases of data about health care, domestic and international banking and financial markets, and other topics in support of the agency's analyses, as well as software and cloud services for additional capabilities and disaster recovery. The amount is based on anticipated requirements and is an increase of \$428,500 from the amount requested for fiscal year 2022.
- **\$779,300 for Equipment Maintenance and Repair**—funds a broad array of IT items needed

for operations. Whenever possible, CBO takes a cost-effective approach to maintenance and repair by negotiating agreements to cover one or more years instead of paying for service and support as they become necessary. In addition, CBO leases copiers and printers to reduce costs. The amount is an increase of \$188,700 from the amount requested for fiscal year 2022, mostly because CBO plans to purchase additional security tools to monitor its internal network for threats.

- **\$382,700 for Expert Consultants**—funds access to outside experts, particularly in health care and finance, to assist in the preparation of cost estimates and analyses; to perform outside reviews of drafts of analyses; and to provide legal support for human resources and litigation actions regarding former and current employees. The amount is based on anticipated requirements and is a decrease of \$11,700 from the amount requested for fiscal year 2022.
- **\$330,700 for IT System Development and Support**—funds major software installations, upgrades, and support. The amount is based on anticipated requirements and is an increase of \$37,400 from the amount requested for fiscal year 2022.
- **\$242,800 for Training**—funds CBO analysts' participation in conferences; technical training in data analysis (including in statistical analysis software), economic modeling, business and report writing, and IT systems and software; and management training for managers. To constrain expenses in this area, CBO conducts internal training and takes advantage of training provided by sister agencies to the extent possible. The amount is based on anticipated requirements and is an increase of \$7,100 from the amount requested for fiscal year 2022.
- **\$144,300 for the Financial Management System (Momentum)**—funds annual costs of CBO's maintenance support for Momentum. The amount is based on anticipated requirements and is the same as the amount requested for fiscal year 2022.
- **\$141,800 for Financial Management Support**—funds an interagency agreement with the Library of Congress as well as CBO's annual independent financial audit. The amount is based on anticipated requirements and is an increase of \$7,900 from the amount requested for fiscal year 2022.

- **\$138,300 for Miscellaneous Temporary Support**—funds ad hoc IT, clerical, and miscellaneous support, as well as other services, throughout the agency during peak workload periods. The amount is an increase of \$20,900 from the amount requested for fiscal year 2022.
- **\$96,400 for Human Resources Contract Support**—funds a variety of costs related to CBO's personnel, including those for posting jobs to the USAJobs website, advertising open positions, and retaining personnel records, as well as minor costs associated with employment services, such as retirement counseling. The amount also funds the initial implementation costs of a system that will improve the agency's continuity of operations plans and enhance telework by its human resources staff. The amount is an increase of \$58,500 from the amount requested for fiscal year 2022.
- **\$78,800 for Editing and Publications Contractor Support**—principally funds services by contractors to help produce CBO's publications. The contractors are used to augment the agency's editing capacity, particularly during peak workload periods. The amount is based on anticipated requirements and is an increase of \$1,800 from the amount requested for fiscal year 2022.
- **\$40,000 for Payroll Processing Support**—funds comprehensive payroll (and related benefits) processing for CBO by the National Finance Center. That agency provides human resources and payroll services to more than 140 government agencies (including all agencies in the legislative branch), offering more efficient and cost-effective services than those agencies would otherwise be able to obtain. The amount is based on anticipated requirements and is the same as the amount requested for fiscal year 2022.
- **\$6,000 for Official Representation**—funds events such as meetings of the Panel of Economic Advisers, meetings of the Panel of Health Advisers, meetings of other outside analysts, and minority recruitment events. The amount is based on anticipated requirements and is the same as the amount requested for fiscal year 2022.

Object Class 26—Supplies and Materials: \$455,700

- **\$366,800 for Library Subscriptions**—funds library (primarily online) subscriptions to a variety of publications and services, including *Congressional Quarterly*, *National Journal*, Lexis-Nexis, EconLit, the Bureau of National Affairs, EBSCO, PROQUEST, the Social Science Research Network, Science Direct, JSTOR, the *Wall Street Journal*, Inside Washington Publishers, and *Energy & Environment*. The amount is based on anticipated requirements and is an increase of \$8,300 from the amount requested for fiscal year 2022.
- **\$88,900 for Office Supplies**—funds expenses for office supplies, reasonable accommodations for employees' requirements under the Americans With Disabilities Act, paper, envelopes, emergency response kits required for evacuation drills, award supplies, and other items. The amount is a decrease of \$11,700 from the amount requested for fiscal year 2022.

Object Class 31—Equipment: \$413,000

- **\$212,900 for Hardware**—funds the purchase and replacement of CBO's laptops and desktops so that the agency can replace hardware that is aging or at the end of its life and continue to move workstations to the cloud. That process happens every year, but more computers will have to be replaced in 2023 than in 2022. The amount is based on anticipated requirements and is an increase of \$56,900 from the amount requested for fiscal year 2022.
- **\$90,000 for Office Equipment**—The amount is the same as the amount requested for fiscal year 2022.
- **\$85,700 for Office Furniture**—funds office furniture for new personnel and the replacement of worn-out furniture. The amount is based on anticipated requirements and is a decrease of \$16,800 from the amount requested for fiscal year 2022.
- **\$21,900 for Software**—funds various software requirements. The amount is a decrease of \$200 from the amount requested for fiscal year 2022.
- **\$2,500 for Books**—funds the purchase of books used by CBO's staff to meet analytical requirements. The amount is based on anticipated requirements and is the same as the amount requested for fiscal year 2022.

Appendix C: Key Staffing Changes and Organization Charts

This appendix describes key staffing changes at the Congressional Budget Office over the past year. It then presents the agency's organization charts.

Key Staffing Changes in 2021 and Early 2022

CBO has had two key staffing changes in the past year.

Carrie H. Colla joined CBO in August 2021 as the Director of Health Analysis. She leads the agency's analysis of health policy issues and oversees CBO's health insurance simulation model.

Before coming to CBO, Dr. Colla was a professor at Dartmouth College. She was also a member of the Physician-Focused Payment Model Technical Advisory Committee at the Department of Health and Human Services. In 2017 and 2018, she was a Robert Wood Johnson Foundation Health Policy Fellow at the National Academy of Medicine, and she has served as a senior adviser to the Center for Medicare and Medicaid Innovation. Her research has focused on examining the performance of health care systems, the effectiveness of payment and delivery-system reforms, disparities in care for rural patients, and improving the quality, accessibility, and cost of care for complex patients.

She holds a Ph.D. in health policy and an M.A. in economics from the University of California, Berkeley, and an A.B. in economics from Dartmouth College.

Mark Smith became CBO's Chief Administrative Officer in January 2022, having advanced from his position as the agency's Chief Financial Officer, which he had held

since 2013. As the head of the division providing all support services for CBO, he has broad responsibilities—for human resources, financial systems, information and technology resources, library services, facilities, and the editing and production of CBO's publications. During his time as Chief Financial Officer, he handled all aspects of planning and implementing the agency's budgetary and financial activities.

Before he came to CBO, Mr. Smith served as a senior financial adviser for the Defense Intelligence Agency (DIA) in its Office of the Chief Financial Officer. He directed and controlled the daily management, reporting, and analysis of the agency's personnel dollars, representing more than 10,000 full-time-equivalent positions. In a previous role in DIA, he served as a senior financial resource manager; in that capacity, he participated in all aspects of the formulation, execution, and fiscal oversight of a budget covering almost all of DIA's appropriated funding. He holds a B.S. in finance from George Mason University.

Organization Charts

In October 2021, CBO reorganized some of the responsibilities in the Budget Analysis Division to better align resources with important policy areas. The result was a new unit—the Finance, Housing, and Education Cost Estimates Unit—composed of employees who analyze policy areas that have financial elements.

Figures C-1 through C-10 show CBO's organizational structure and list the names of all of CBO's managers.

Figure C-1.

Organization Chart—Entire Agency

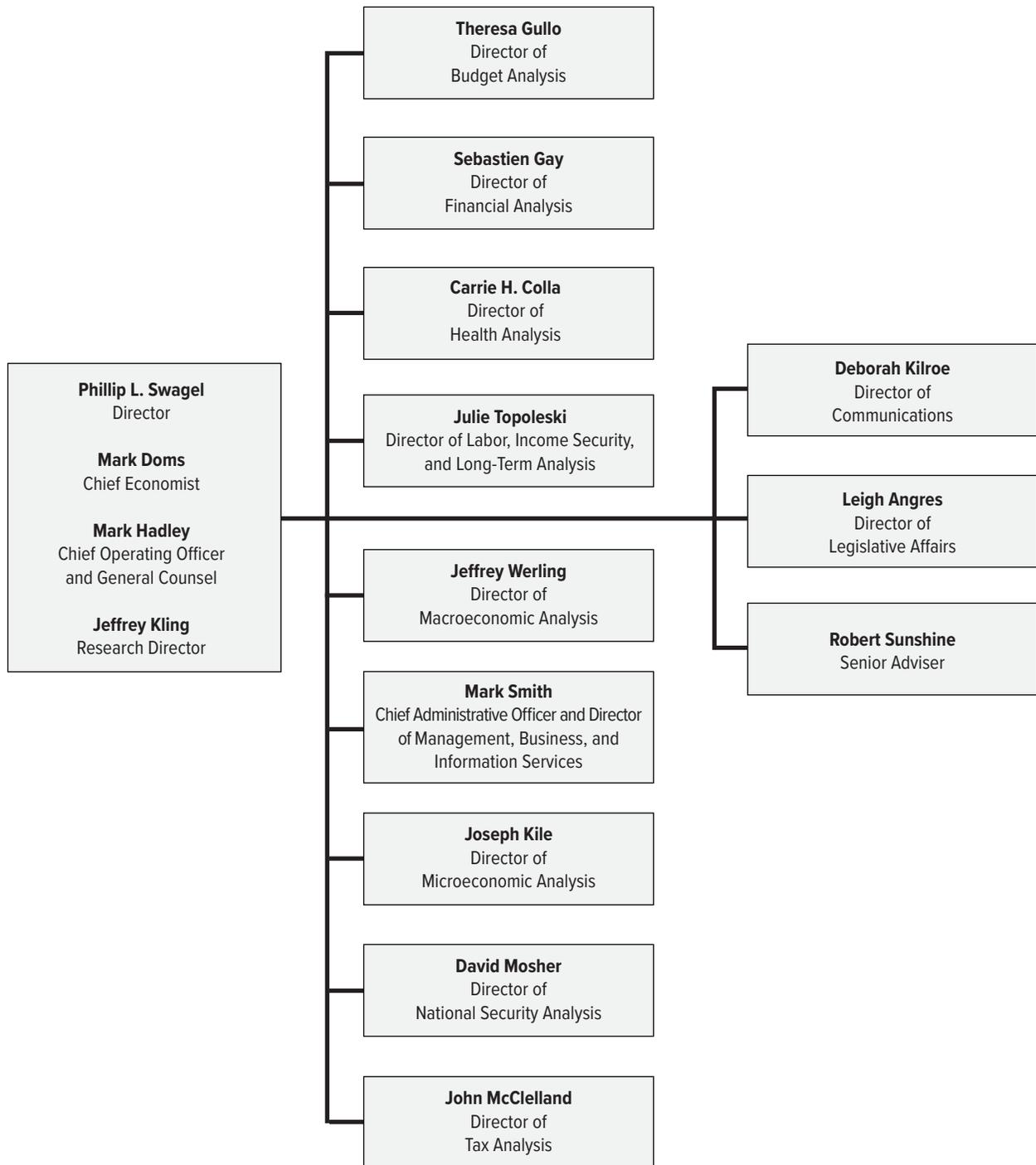


Figure C-2.

Organization Chart—Budget Analysis Division

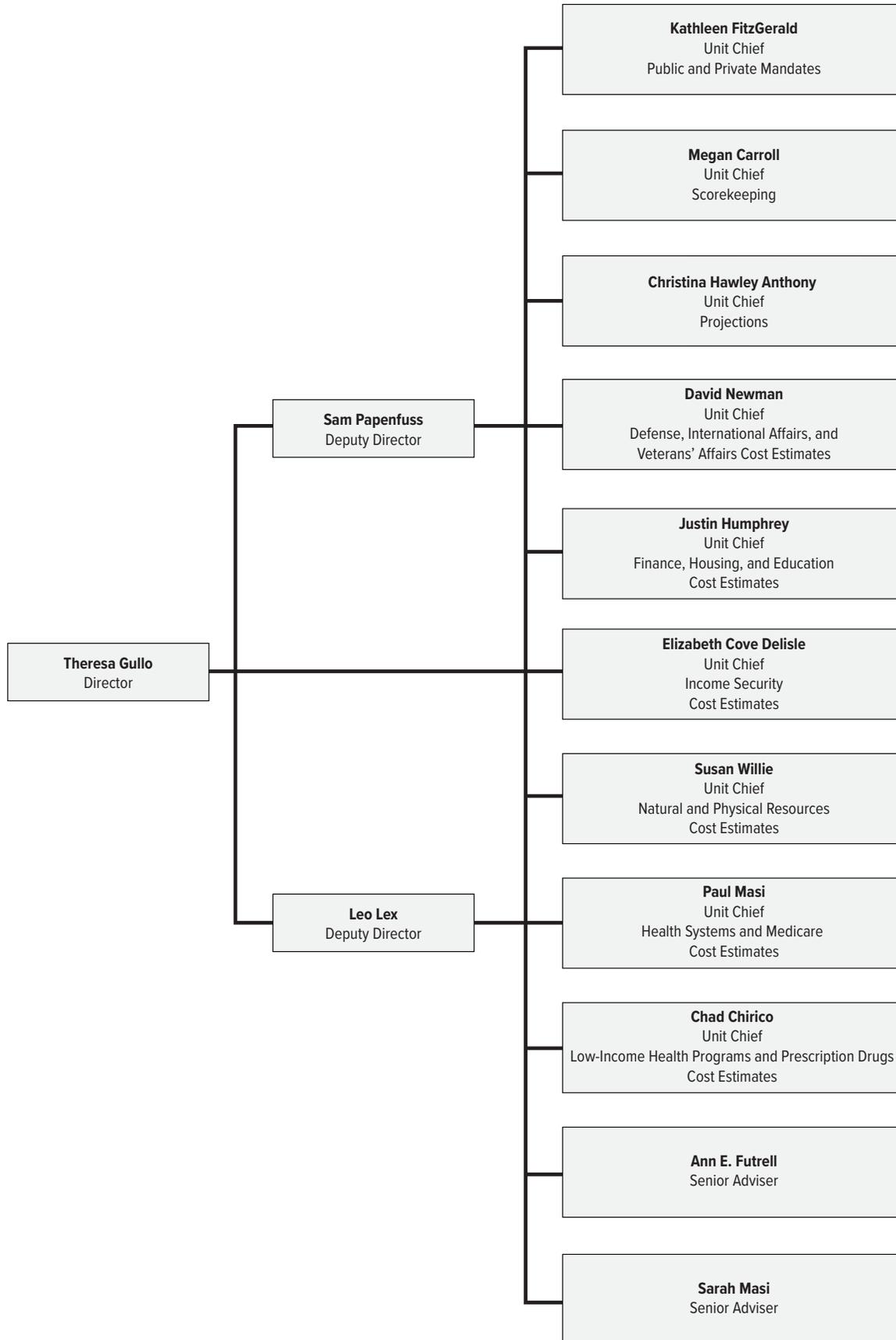


Figure C-3.

Organization Chart—Financial Analysis Division

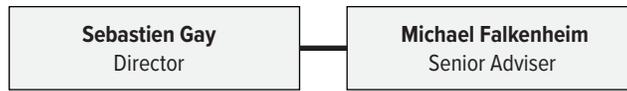


Figure C-4.

Organization Chart—Health Analysis Division

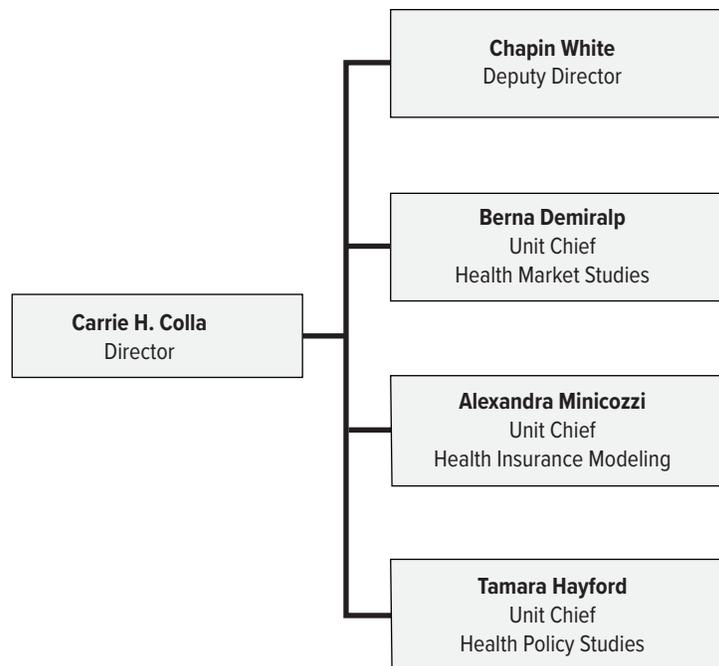


Figure C-5.

Organization Chart—Labor, Income Security, and Long-Term Analysis Division

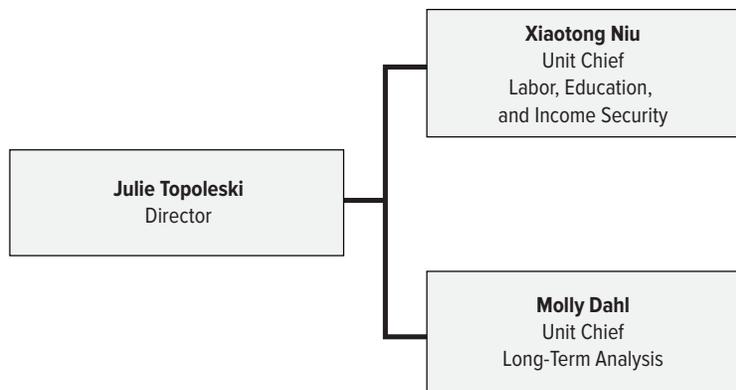


Figure C-6.

Organization Chart—Macroeconomic Analysis Division

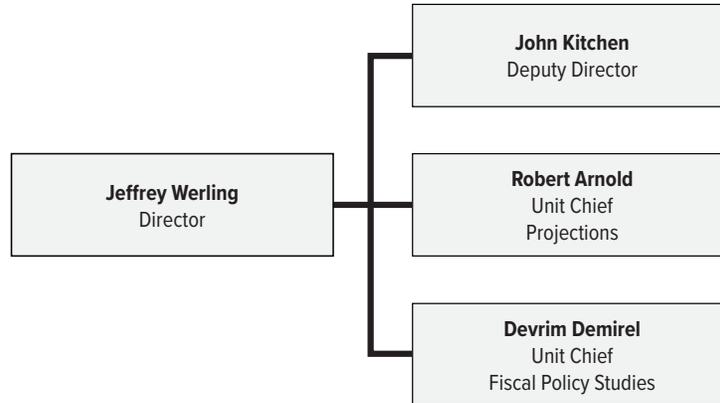


Figure C-7.

Organization Chart—Management, Business, and Information Services Division

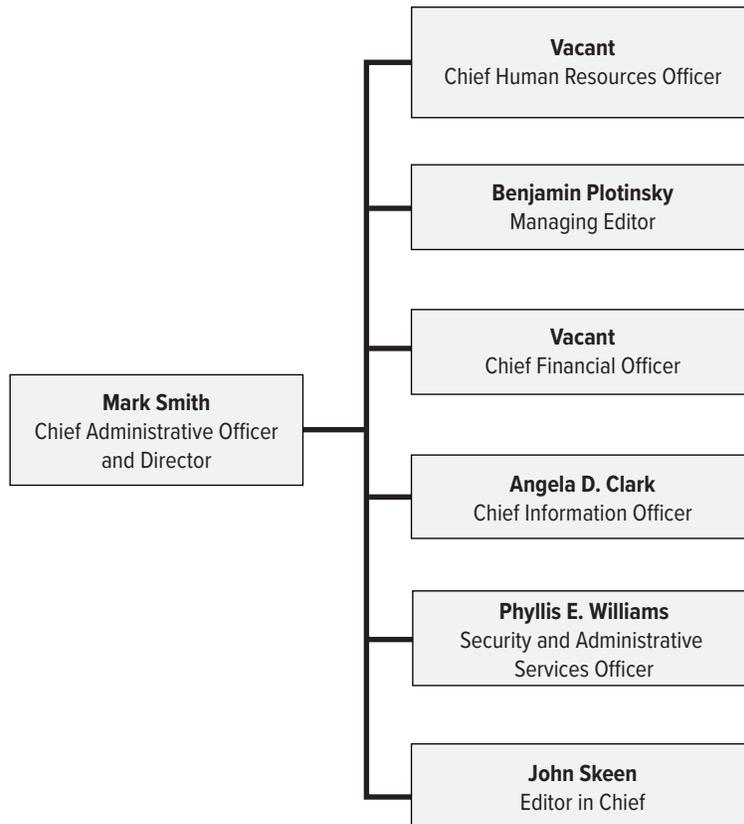


Figure C-8.

Organization Chart—Microeconomic Studies Division

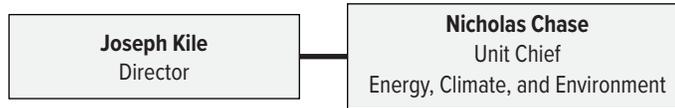


Figure C-9.

Organization Chart—National Security Division

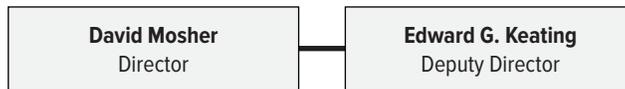
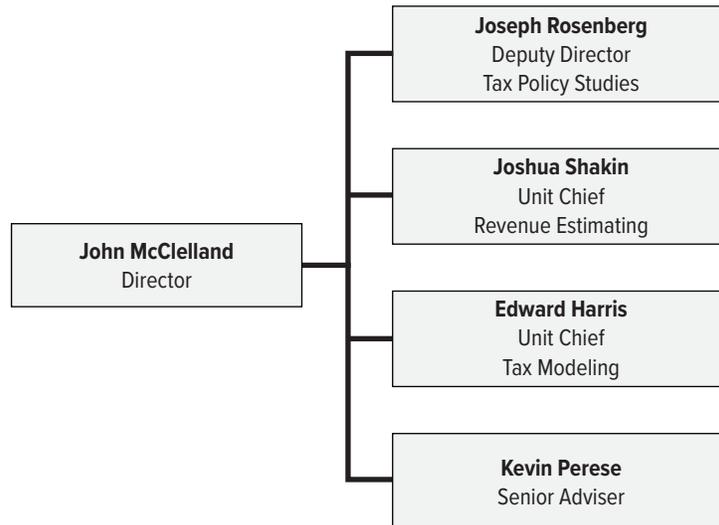


Figure C-10.

Organization Chart—Tax Analysis Division



Appendix D: CBO's Products and Internal Operations in 2021

During calendar year 2021, the Congressional Budget Office continued to provide the Congress with high-quality budgetary and economic analysis. The agency also made improvements in its internal operations.

Technical Assistance

CBO provides assistance to Congressional committees related to legislation at various stages of the legislative process. To the extent practicable, CBO also provides information to Members' offices. The most common request is for a preliminary estimate of the effects of a bill or a tentative proposal on mandatory spending, but CBO's assistance may also involve answering general questions about the budget or responding to questions about previously published cost estimates. CBO fulfilled several thousand requests for such assistance in 2021. Such information was generally provided to committees or the leadership of the House or Senate for legislative proposals that they had designated as priorities. CBO provides similar information when amendments to bills are being considered.

Cost Estimates and Mandate Statements

In 2021, CBO completed 401 formal cost estimates—mostly to fulfill the statutory requirement to provide estimates of the cost of bills reported by committees. The cost estimates generally included explanations of their components and of the estimating methods used. Most also included mandate statements, which assess whether legislation contains intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and, if so, assess the magnitude of the mandates' effects on the private sector and on state, local, and tribal governments. CBO also reviewed 380 bills in 2021 that were scheduled to be considered on the House's suspension calendar.

Scorekeeping Tabulations

In 2021, CBO provided about 100 scorekeeping tabulations, including reports with account-level detail for

individual appropriation bills at all stages of the legislative process, summary tables showing the status of discretionary appropriations (by appropriations subcommittee), and running totals of the budgetary effects of enacted legislation on a year-to-date basis. The number of scorekeeping tabulations required for an appropriation cycle can vary depending on its duration and complexity; in recent years, that number has ranged from about 100 to 150.

Reports, Working Papers, and Testimony About the Budget and Economy

CBO provides reports, analyses, and other information to policymakers throughout the legislative process. In 2021, the agency described its baseline projections in a major report about the budget and economic outlook. CBO also provided a comprehensive analysis of the long-term outlook for the federal budget—that is, the outlook over the next 30 years. Besides those major reports, the agency produced many other analyses of budget and economic issues. All told, the agency produced 79 such publications; they are arrayed by category below.

Projections and Budget Issues in Major Recurring Reports

Additional Information About the Updated Budget and Economic Outlook: 2021 to 2031 (July)

An Update to the Budget and Economic Outlook: 2021 to 2031 (July)

Additional Information About the Budget Outlook: 2021 to 2031 (March)

The 2021 Long-Term Budget Outlook (March)

Additional Information About the Economic Outlook: 2021 to 2031 (February)

The Budget and Economic Outlook: 2021 to 2031 (February)

An Overview of the Economic Outlook: 2021 to 2031 (February)

Budget Issues

Monthly Budget Review (12 issues)

Common Budgetary Terms Explained (December)

Federal Debt and the Statutory Limit, November 2021 (November)

CBO's Projections of Federal Receipts and Expenditures in the National Income and Product Accounts: 2022 to 2031 (November)

Federal Debt and the Statutory Limit, September 2021 (September)

The Budgetary Effects of Major Laws Enacted in Response to the 2020–2021 Coronavirus Pandemic, December 2020 and March 2021 (September)

Federal Debt and the Statutory Limit, July 2021 (July)

Report on the Troubled Asset Relief Program—July 2021 (July)

Expired and Expiring Authorizations of Appropriations: Fiscal Year 2021 (May)

Budgeting for Federal Investment (April)

Legislation Enacted in the Second Session of the 116th Congress That Affects Mandatory Spending or Revenues (April)

CBO Explains Budgetary Scorekeeping Guidelines (January)

Final Sequestration Report for Fiscal Year 2021 (January)

Answers to Questions for the Record Following a Hearing on CBO's Budget Projections Conducted by the Subcommittee on Fiscal Responsibility and Economic Growth of the Senate Committee on Finance (January)

Climate and Environment

How Carbon Dioxide Emissions Would Respond to a Tax or Allowance Price: An Update (December)

Distributional Effects of Reducing Carbon Dioxide Emissions With a Carbon Tax (September)

Budgetary Effects of Climate Change and of Potential Legislative Responses to It (April)

Finance

How CBO Estimates the Market Risk of Federal Credit Programs (November)

Estimates of the Cost of Federal Credit Programs in 2022 (October)

Fair-Value Budgeting: Practical Issues (July)

Governmental Risk Taking Under Market Imperfections (June)

Fair-Value Cost Estimation and Government Cash Flows (April)

Measuring the Cost of Government Activities That Involve Financial Risk (March)

Health Care

Data and Methods for Constructing Synthetic Firms in CBO's Health Insurance Simulation Model, HISIM2 (December)

CBO's Simulation Model of New Drug Development (August)

Research and Development in the Pharmaceutical Industry (April)

A Public Option for Health Insurance in the Nongroup Marketplaces: Key Design Considerations and Implications (April)

A Comparison of Brand-Name Drug Prices Among Selected Federal Programs (February)

CBO's Model of Drug Price Negotiations Under the Elijah E. Cummings Lower Drug Costs Now Act (February)

Income Distribution

How Changes in the Distribution of Earnings Affect the Federal Deficit (October)

The Distribution of Household Income, 2018 (August)

Infrastructure and Transportation

Fiscal Substitution in Spending for Highway Infrastructure (October)

Answers to Questions for the Record Following a Hearing on Options for Funding and Financing Highway Spending (August)

Effects of Physical Infrastructure Spending on the Economy and the Budget Under Two Illustrative Scenarios (August)

Testimony on Options for Funding and Financing Highway Spending (Testimony before the Senate Committee on Finance) (May)

Answer to a Question for the Record Following a Hearing on the Long-Term Solvency of the Highway Trust Fund (May)

Testimony on Addressing the Long-Term Solvency of the Highway Trust Fund (Testimony before the Senate Committee on Environment and Public Works) (April)

Macroeconomic Analysis

CBO's Economic Forecasting Record: 2021 Update (December)

CBO's Model and Projections of U.S. International Investment Holdings and Income Flows (August)

The Economic Effects of Financing a Large and Permanent Increase in Government Spending (March)

National Security

Illustrative Options for National Defense Under a Smaller Defense Budget (October)

An Analysis of the Navy's Fiscal Year 2022 Shipbuilding Plan (September)

Alternative Approaches to Adjusting Military Cash Pay (September)

The Effects of Large-Scale Maintenance Actions on the Availability of the Air Force's Aircraft (September)

Usage Patterns and Costs of Unmanned Aerial Systems (June)

Projected Costs of U.S. Nuclear Forces, 2021 to 2030 (May)

The U.S. Military's Force Structure: A Primer, 2021 Update (May)

An Analysis of the Navy's December 2020 Shipbuilding Plan (April)

Projected Acquisition Costs for the Army's Ground Combat Vehicles (April)

The Capacity of the Navy's Shipyards to Maintain Its Submarines (March)

National Cruise Missile Defense: Issues and Alternatives (February)

Costs of Implementing Recommendations of the 2019 Missile Defense Review (January)

Taxes

How Specifications of the Reference Tax System Affect CBO's Estimates of Tax Expenditures (December)

The Distribution of Major Tax Expenditures in 2019 (October)

Understanding Federal Estate and Gift Taxes (June)

Revisiting the Extent to Which Payroll Taxes Are Passed Through to Employees (June)

Veterans' Issues

The Veterans Community Care Program: Background and Early Effects (October)

The Role of the Department of Veterans Affairs in the Single-Family Mortgage Market (September)

Other Topics

Discrete Choice Models for Estimating Labor Supply (April)

Estimating the Legal Status of Foreign-Born People (March)

The Budgetary Effects of the Raise the Wage Act of 2021 (February)

Strengthening Responsiveness

In 2021, CBO continued to provide the Congress with budgetary and economic information in a timely manner to inform the budget and policy process. That information took a number of forms, including cost estimates, technical assistance, and reports.

Cost Estimates

Of the 401 formal cost estimates that CBO transmitted to the Congress in 2021, 297 applied to bills that were considered on the floor of the Senate or House of Representatives. And of those 297 estimates, about 70 percent were provided by CBO before that consideration on the floor took place. The past year's legislative activity was unusual, with much of the Congress's attention (and CBO's activities) focused on large, cross-cutting bills: the American Rescue Plan Act of 2021, the Infrastructure Investment and Jobs Act, and the Build Back Better Act of 2021. CBO reviewed 380 bills that were scheduled to be considered on the House's suspension calendar (which is generally used to handle noncontroversial bills that are expected to pass quickly and with little debate). Beginning in June 2021, as part of its ongoing efforts to be transparent, CBO began posting on its website budgetary information for those bills. Before then, CBO transmitted the effects of suspension bills on mandatory spending and revenues directly to the Majority and Minority Leaders of the House of Representatives and the House Committee on the Budget.

Technical Assistance

In 2021, CBO's analysts responded to thousands of requests from Congressional staff for technical assistance. The analysts often worked one-on-one with Congressional staff on several versions of a proposal, aiming to provide the Congress with information in a timely manner—generally before a scheduled markup took place. Another common request was for a preliminary estimate of the direct spending effects of a bill or legislative proposal. The assistance typically happened through a combination of email, phone calls, face-to-face meetings, and virtual meetings. In addition, CBO provided information about the budgetary effect of thousands of amendments to legislation, particularly for appropriation bills, versions of the National Defense Authorization Act, the Infrastructure Investment and Jobs Act, and the Endless Frontier Act.

Reports

Every year, CBO publishes a series of reports, along with supplemental data, about the agency's baseline projections. But the agency published more frequent updates of those projections than usual in 2021, striving to provide the Congress with timely information as it confronted the coronavirus pandemic and the resulting economic crisis.

Enhancing Transparency

Transparency is an essential part of CBO's long-standing commitment to providing clear, objective, insightful, and timely information to the Congress and the public. In 2021, CBO focused on bolstering transparency about its methods and data in a variety of ways:

- **Testifying and Publishing Answers to Questions.** CBO presented testimony at five Congressional hearings and published 23 answers to subsequent questions from Members of Congress. CBO also responded to occasional requests from Members for public answers to various other questions.
- **Explaining Its Analytical Methods.** CBO published various reports explaining its analyses and made some supporting documents and computer code available. For instance, CBO described the model that it uses to project estate and gift tax revenues in its baseline. In addition, most cost estimates included explanations of how they were developed.
- **Releasing Data.** Comprehensive sets of data files of CBO's projections were published with *The Budget and Economic Outlook: 2021 to 2031* and *The 2021 Long-Term Budget Outlook*. Most reports were accompanied by files providing the data underlying the charts and tables. And some reports, such as one on the distribution of household income, included files of supplemental data.
- **Analyzing the Accuracy of Its Estimates.** CBO publishes a report each year that assesses the quality of its baseline budget projections for the previous fiscal year and identifies factors that might have led to under- or overestimates. The 2021 edition of that report was published in early 2022. CBO also released a report examining the accuracy of its economic projections.
- **Comparing Its Current Estimates With Its Previous Ones.** In several of its recurring publications, CBO explained the differences between projections made

in 2021 and those made in the previous year. In addition, when applicable, cost estimates explained the extent to which they differed from estimates for similar bills earlier in the Congressional session.

- **Comparing Its Estimates With Those of Others.** CBO regularly compared its estimates with the budget projections of the Administration, with the economic projections of private forecasters and other government agencies, and with the policy analyses of various organizations. For instance, CBO presented outside forecasts along with its February 2021 and July 2021 economic projections. When time did not allow for a formal publication, CBO often discussed such comparisons with Congressional staff.
- **Estimating the Effects of Policy Alternatives.** CBO prepared reports to estimate the effects that various assumptions about future policies would have on budgetary outcomes.
- **Describing How Much Uncertainty Surrounds Its Estimates.** CBO routinely included a discussion of uncertainty in its cost estimates and in its budget and economic projections. When it was possible, those discussions included information about how much the estimate could vary if key factors differed from CBO's estimates. In reports, the agency also developed likely ranges for some key projections—including projections of federal debt and economic growth. In addition, CBO published an interactive workbook to allow users to see how changes in economic conditions might affect the federal budget.
- **Creating Data Visualizations.** To promote understanding of its analyses, CBO published information in alternative formats, such as slide decks, infographics, and a new type of report that emphasizes charts. Those publications included a series of four infographics that illustrated spending and revenues in the federal budget in 2020.
- **Conducting Outreach.** The most important form of outreach was direct communication between CBO and the Congress in person, by phone, by video conference, and by email. In 2021, CBO's Director met with more than 100 Members of Congress, either individually or in groups. CBO also solicited input from a range of policy experts through its Panels of Economic and Health Advisers and obtained many external reviews of its work. In addition, CBO's staff made presentations about the agency's processes, work

in progress, and recently completed work. And the agency published blog posts highlighting key issues.

Staff Development

Because of challenges posed by the pandemic, CBO's approach to staff development in 2021 was different from its usual approach. For example, to stay current on topics that are important to CBO's work for the Congress, staff members participated in virtual seminars to share information about their analyses, data, and estimating techniques, and the agency hosted presentations by outside researchers and other experts.

CBO sustained its emphasis on training by reimagining the way it was delivered, making a transition to virtual participation. The agency funded staff members' participation in virtual conferences of researchers, practitioners, and government employees on various economic and policy topics, as well as training in analytic tools and various skills. It provided ongoing training to staff members about the mechanics of scoring and cost estimating; for example, they attended virtual workshops on CBO's baseline projections, reconciliation, fair-value estimates of the cost of credit programs, best practices for preparing cost estimates, and applying scorekeeping guidelines. CBO again worked with the Office of Congressional Workplace Rights to provide training to all staff members about their rights as described in the Congressional Accountability Act of 1995 Reform Act, as well as training on other topics important to the success of the agency's diverse workforce. CBO continued to emphasize the need to clearly communicate the results of analyses: It provided training on effective presentation skills and data visualization, and it redesigned required courses on writing and conducted them virtually. Finally, CBO restarted management training and training in soft skills that were halted during the first year of the pandemic. By helping the agency's staff members collaborate better, those skills help CBO create strong products.

Contracts

As it sought offers from contractors, CBO continued to encourage small businesses to participate by including them in its requests for price quotes and in its market research and, before making an award, by having each prospective contractor identify its type of business and its size. As a result of those efforts, CBO awarded 173 contracts and purchase orders to small businesses in fiscal year 2021. Of those contracts and purchase orders, 16 went to minority-owned businesses and 47 to women-owned businesses.

Information Technology

CBO implemented numerous improvements to its information technology infrastructure and practices in 2021. Among other advances, the agency:

- Continued moving CBO's computing operations to the cloud, making them faster and more accessible;
- Completed upgrades of physical infrastructure to replace aging equipment;
- Completed other upgrades and implementations of physical infrastructure, providing extensive remote teleconference capabilities as part of a return-to-office initiative; and
- Hired and brought on board a new chief information officer and deputy chief information officer.

About This Document

This document presents the Congressional Budget Office's request for appropriations for fiscal year 2023.

Leigh Angres, Mark Smith, and Kamna Virmani prepared the document with assistance from Angela D. Clark, Ann E. Futrell, Annita Gulati, Theresa Gullo, Leo Lex, Sam Papenfuss, and Stephanie M. Ruiz (formerly of CBO).

Mark Doms, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the document. Benjamin Plotinsky edited it, and Jorge Salazar created the graphics and prepared the text for publication. The document is available at www.cbo.gov/publication/57700.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.



Phillip L. Swagel
Director
February 2022